EXCURSIONS

"Human knowledge has two forms: it is either intuitive knowledge or logical knowledge; knowledge obtained through the imagination or knowledge obtained through the intellect; knowledge of the individual or knowledge of the universal; of individual things, or of the relations between them: it is, in fact, productive either of images or of concepts."* To produce both images and concepts is the object of the excursions which are so prominent a part of the work of the school, and which form a continuous experience in the life of the pupil. From the kindergarten through the high school he goes out on excursions to gather material for study or to make more concrete to him the knowledge he gains from the printed page or from other secondary source. Sometimes, as in the high-school excursion of the Art Department to see an exhibit of Japanese prints, exquisite in line and color, the purpose is to heighten consciousness through contact with esthetic values. The result of such an excursion for the pupil must be an increased sense of beauty and form whether or not he bring back an incidental knowledge of the difference between a Hiroshige and Hokusai. This "heightening of consciousness" is the object, I think, in that school activity which is closely connected in theory with the excursions, the artist recitals; although in the exact sense of terms these recitals are "incursions" rather than excursions, their purpose seems to be the direct bringing of primary experience to the life of the pupil—the making of a contact, as physicists say, between the pupils and fact, which is in this case strong, beautiful composition and fine artistry. For this reason I have included the artist recitals in the list of this year's excursions, because their contribution to the pupils seems to be identical in quality with a certain type of excursion.

In excursions where knowledge gained by the intellect is the thing sought after, heightening of consciousness is incidentally included. (See Miss Cleaves' article on *Eighth-Grade Field Trips in Physiography,* in this volume.) On an industrial excursion to South Water Street the second grade brought back for classroom work material much more real to them, probably, than that same material

*Bendetto Croce, *Theory of Æsthetic,* tr. by Douglas Ainslie, Macmillan & Co., London, 1909.

would have been, presented through leaflets or other indirect means. (See quotation from morning exercise by second grade in article of this volume on *A Study of Foods and Food Supply.*) The second-grade children may have brought back a sense of the vastness of the city's industry. But the things they saw, the freight-sheds and the refrigerator-cars, the banana storage-rooms at Garibaldi's and the fruit-stores along South Water Street, gave them directly through their senses the stuff to which they applied their minds in the class-room. To a twelfth-grade chemistry class, the excursion to the Cement Mills may serve two purposes: their fund of chemical knowledge may be increased, and they may see proven practically the things they have learned from a textbook and tried, in less practical fashion, in the laboratory. The usefulness of the laboratory is extended: in the commercial plant there is suggestion of great possibility. New activities are glimpsed which cannot be sensed in the laboratory, which is in itself a more direct way of gaining information than the textbook. The pupil comes back to the laboratory with an increased sense of its purpose.

The value of both types of excursion lies, of course, in the directness of the experience. For either sort there must be definite, careful preparation. The industrial excursion, which is a type of the intellective excursion, brings an increased knowledge of the particular industry studied; the thing gained is actual quantitative increase of knowledge, whether the excursion be of the third grade to a cold-storage plant or of a high-school class in commercial geography to the Stock Yards. Also, there is usually an increased sense of lack of knowledge: a pupil comes back from an excursion asking questions; new fields are open to him; he sees new possibilities in the subjects he has been studying. He may acquire intellectual curiosity. The successful excursion brings out a sense of initiative in children. They learn that there are new things to know, and from this they are moved to try to see and feel and correlate with their already acquired knowledge the new sensations and experiences they meet.

There is no modifying medium; the material itself is the thing that the child touches, sees, and learns to know. He gains his knowledge through his senses and it becomes vivifying fact to him, not dull abstraction. The first-grade child who has built a brush house in Budlong's Woods has a factual knowledge of the difficulties of primitive peoples who built without tools. From an Eskimo hut in

the Field Museum he gets sure knowledge of the structure and look of this sort of domicile that gives him a standard of criticism for the model he makes in clay. He knows what an Eskimo house should be, not merely from a flat picture or an attenuated model, but from the thing in its setting; though it might be better if he could go to Alaska to see it in reality. Very often, however, the pupils bring more tangible things from the excursions than knowledge or criteria. The fourth grade go to the sand-dunes and to Ravinia. Back to school they come, laden with flowers and fruits. They learn to know the spring flowers, and press them to keep in herbariums, and from the fruits they make jelly and preserves. The making of thorn-apple jelly out of thorn-apples one has collected has something of the flavor of a great adventure and the savor of the dignity of toil. Fred's paper *About Jelly* shows a spirit of high seriousness in matters culinary.

I am going to tell you how to make thorn-apple jelly. Cut out the worms and bad places, because they are bad to eat. Wash them because they are dirty. Boil them to make the juice come out. Put a cup and a quarter of sugar into 1 cup of thorn-apples, to make them good. Boil them again, to make them be jelly. Let them jell one day and one night. Then it will be jelly. Pour some parafine on them. Then it will be done.

The use of first-hand observation in science teaching in the fourth grade is brought out in an article in Vol. II of the Year Book. (See Miss Hall's article on *A Nature Excursion,* p. 75.) This and another morning exercise of this grade showed how diversely the experience of the sand-dunes may be used.

MORNING EXERCISE: SAND DUNES

Hermon. We haven't much to tell this morning, but we have lots to show. (*Miss Hall holds up a glass jar with a large frog in it.*) We are going to keep him in the third-grade aquarium.

Elizabeth. We went to the sand-dunes yesterday and found quite a great many grapes. We got three pans full. These are the sorts of grapes. I am going to tell you how we found them growing. There was a big vine growing on the sand. We are making grape juice out of the grapes this morning (*holding up a quart jar about half full of grape juice*). This is what I have, and all the children will have about that much.

Clara. We found some cactus growing. They grow right in the woods in the sand. This is the plant and fruit. We are going to make jelly out of the fruit.

Thedore. We got some rose-hips that we are going to preserve. Miss

Hall made this (*showing a small jar of preserves*) out of them. And there are parrots out at Millers, Indiana. Did you ever see any of them? (*He holds up a twig with two milkweed pods perched amongst the branches.*)

Phyllis. We found a plant called "dogwood." You can always tell this plant, because it always has a red stem, all winter long.

Alfred. This is tumble-weed. (*He shows one small green plant and a large brown one.*) This is the tumble-weed when growing and this is when it is dry. When they are out of the ground, the wind blows them down the hill and out into the road and all over, and that scatters the seed.

FOURTH-GRADE GROUP ON A FIELD TRIP

It can be seen that the excursions are an organic part of the school course. In one or two instances, however, they have developed into an extra-curricular activity. One of the teachers announced once that he was willing to demonstrate Mr. Atwood's "Celestial Sphere"* to anyone interested. The time agreed upon for the excursion was the usual play-period: so many pupils were eager to go that a schedule which covered a period of two weeks was arranged. Many pupils begged to be allowed to make several visits to the sphere:

*The "Celestial Sphere" is a piece of astronomical apparatus which represents the heavens and is so arranged that a number of persons may stand within the globe and see the winter and summer constellations.

many watched the heavens nightly to identify the constellations they had learned to know during their visits. Perhaps some pupils developed a lasting interest in astronomy. An instance of the voluntary excursion altogether free from scholastic touch is the "Saturday hike." Four or five times in the course of the year any of the high-school boys who wish to, go out on an all-day walk with one of the instructors: the girls take two or three such hikes. In the course of the walk the boys usually cover about fifteen miles, stopping at noon to cook luncheon over an open fire. The expedition has something of the spirit of camping: certainly the conscious ideal of the teacher is to stimulate that craving for things out-of-doors which is characteristic of the camper. Perhaps an occasional informational word slips in innocuously, but it comes as the result of a genuine question on the part of the students, who become interested enough in natural phenomena to manifest curiosity. The fact that the pupils ask for these excursions in their out-of-school time makes one believe that they have a definite value, though from the point of view of solid preparation and school importance they are secondary. Through direct contact with academic material the pupils learn more vividly to experience, to know more keenly, and more largely to enjoy living.

LIST OF EXCURSIONS FOR THE YEAR 1914-15

This list of excursions, made by grades and classes throughout the school, shows many kinds of excursions and a great variety of places visited. Many of them are to near-by places, like Lincoln Park and the Chicago Academy of Sciences. This sort of excursion is possible for any city school, as are many of the industrial excursions. The list is only approximate, since the excursions have not yet all been taken at the time of the writing of this report. In the case of the fourth and fifth grades, the excursions listed are those taken by last year's classes; they are practically duplicated each year.

KINDERGARTEN

A Grocery Store.

Lincoln Park (including special trips to The Chicago Academy of Sciences, conservatory and lake shore).

FIRST GRADE

Budlong's Woods ..... Nature Study
Farm ..... Nature Study
Lincoln Park (many trips to the "Zoo" and other special features)....
..... Nature Study and Clay Modeling
The Field Museum (two trips)..... History

SECOND GRADE

A Grocery Store ..... Industrial Study
A Truck Garden ..... Industrial Study
South Water Street Commission Market..... Industrial Study
Fox River Butter Company..... Industrial Study
Hull House (to see weaving)..... Handwork
The "Zoo" in Lincoln Park..... Clay Modeling

THIRD GRADE

The Sand Dunes at Millers, Indiana..... Science and Nature Study
Garibaldi, Cuneo & Company (wholesale fruit house)..... Industrial Study
Booth's Fisheries (cold-storage plant) ..... Industrial Study
South Water Street Commission Market..... Industrial Study
Haymarket Square ..... History
Water Works Pumping Station..... History
Boat Trip on Chicago River (to see harbor improvements and entrance
to Drainage Canal) ..... History

FOURTH GRADE

The Sand-Dunes at Millers, Indiana..... Science and Nature Study
The Art Institute ..... History
The Field Museum ..... Geography
Boat Trip on the Chicago River (to see the industries bordering both
branches) ..... Industrial Study
Stony Island ..... Geography

FIFTH GRADE

In twenty-seven excursions, made chiefly by automobile, the following points of interest were visited in connection with the different subjects of study under which they are listed.

History—

Site of Ft. Dearborn; Columbus Memorial Building; Massacre Monument, 1812; Statue of Leif Ericson; Marquette Bowlder Monument, Summit; LaRabida and Columbus Caravels; Washington Statue; Drake Fountain of Columbus; Statue of Columbus in South Chicago; Columbus Statue at Sixty-fourth Street and Wentworth Avenue; Chicago Historical Society; Water Tower, Chicago Avenue Water-Works; State-Line Monument; House where Great Fire Started in 1871; Marquette Build-

ing, tablets and reliefs; Central Trust Building, mural paintings; Marquette Cross, foot of Robey Street; Field Museum; Colonial Houses in Winnetka, Evanston, and Kenwood; Joliet Statue, Joliet; Statue of La Salle, Lincoln Park.

Physiography—

Sand Bar at Sinai Temple; Summit, Calumet, and Tolleston beaches; Riverside, meanders of the Des Plaines; Oak Park spit; Austin spit; Rocky Ledge Park; Calumet Beach on Parkway to Riverside; Glenwood spit on Des Plaines Avenue; Garfield Park Conservatory; Rose Hill sand-bar; Tolleston beach—Clark Street, Michigan Avenue, West Pullman; Mount Forest; The Sag; North Shore Drainage Canal; Blue Island; Washington Heights—beaches and sand-bar; Field Museum; relief maps; Cragin, Calumet beach; Mount Clair, Glenwood beach; Glenwood bluff at Winnetka; Stony Island, mountain-fold; County Line, ravines and Indian tree; Ravinia, lake shore.

Industrial Study—

Twenty-second Street lumber yards; Old lock of Illinois and Michigan Canal; Union Lime Works Stone Quarry; Grand Avenue Stone Quarry; Outcrop west of Palmer Square; Hull House Museum; Dutch Wind Mill on Des Plaines; Lockport Power-House and Canal-Locks; Tetzner's Warping Works; Flour Mill; Field Museum, exhibit of textiles.

Art and Architecture—

Fountain of the Great Lakes and park statuary; St. Paul's and St. Michael's Cathedrals; Fourth Presbyterian Church; Field Museum; German Building in Jackson Park; The University of Chicago buildings; Buildings of the Illinois Athletic Club and University Club.

SIXTH GRADE

The Art Institute (to see exhibits of water colors, Japanese prints, statuary, pottery and handwork) ..... Art
Lincoln Park (many visits to conservatory, bird and animal houses, grandmother's flower-garden, etc.) ..... Science, Art and Geography
Jackson Park (to see Wooded Isle, Columbus caravels, La Rabida, etc.) ..... Science and History
Hull House (to see exhibits of textiles, spinning and book-binding) ..... Art
The Kalo Shop ..... Handwork
Burley and Tyrrell Co., Pottery ..... Handwork
Pushman Brothers, Oriental Rugs ..... Handwork
Newspaper Office of the *Chicago American* ..... Civics
Meeting of the City Council ..... Civics
Life-Saving Station ..... Civics
The Polls on Election-Day ..... Civics
Engine-House of the Fire Department ..... Civics
Illinois Brick Yards at Purington, Illinois ..... Industrial Study

The Bristol Mineral Springs Company.....Industrial Study
Illinois Vinegar and Yeast Company.....Industrial Study
John F. Jelke & Company (manufacturers of butterine).....Industrial Study
The Ward Baking Company .....Industrial Study
Sub-basements at Marshall Field & Company.....Industrial Study
Ice Plant of The Consumers Company.....Industrial Study
Lindsay Light Company .....Industrial Study
Land Show at the Coliseum.....Industrial Study
J. E. Tilt Shoe Company.....Industrial Study
Northwestern Terra-Cotta Company.....Industrial Study
Yerkes Observatory at Williams Bay, Wisconsin.....Science
The Chicago Academy of Sciences (many trips).....Science
Peterson Nursery .....Science

SEVENTH GRADE

The Sand-Dunes at Millers, Indiana.....Nature Study
Marshall Field & Company.....Industrial Study
Donnelley & Company (printing plant).....Industrial Study
Newberry Library (illumination of books).....Art

EIGHTH GRADE

The Drainage Canal to Lockport.....Civics
Winnetka .....Physiography
Village of Gross Point.....Physiography
Mount Forest Island and Sag.....Physiography
Cragin and Galewood .....Physiography
Thorne Creek .....Physiography
Worth and Palos Park.....Physiography
Stony Island .....Physiography

HIGH SCHOOL

General Science—

Fifteen excursions to typical localities in the Chicago region, such as: Beverley Hills, Stony Island, Mount Forest, Glencoe.
Theater to see *Salisbury's* Moving Pictures of Wild Life.
Theater to see *Williamson's* Submarine Moving Pictures.

Domestic Science—

Bowman Dairy Distributing Station in Chicago.
Bowman Dairy Receiving Station, Barrington, Illinois.

Physics and Chemistry—

Gas-Plant of the People's Gas Light & Coke Company.
Power-Plant of the Commonwealth Edison Company.
The Illinois Steel Company, South Chicago.
The Universal Cement Works, Buffington, Indiana.
The Standard Oil Company Plant, at Whiting, Indiana.

The Illinois Vinegar and Yeast Company.
A Central Heating Station in the Downtown District.
Ice Plant of The Consumers Company
Thomas J. Dee & Company (metal refiners and assayers).

Commercial Geography—
The Union Stock Yards.
The Wisconsin Steel Works, South Chicago.
The Standard Oil Company Plant at Whiting, Indiana.
The Chicago Board of Trade.

Literature—
Theatre (to see Sir Johnstone Forbes Robertson in *Hamlet*).
The Art Institute (to see Mr. Samuel Hume's exhibit of modern stage craft).

Current History—
Lecture on *Women and War,* by Mme. Rosika Schwimmer of Budapest.
Hull House.
Theater to see *Uncle Sam at Work* (moving pictures).
Hearing of Federal Commission of Industrial Relations.
The Art Institute to see Exhibit of American Artists.
O'Brien's Art Gallery to see examples of contemporary Spanish Art.

French (special class)—
Lecture: *M. Eugene Brieux* by Mme. Brugnot.
Lecture: *The French Theater* by M. David.
Theater to see *Suzette,* one-act play by M. Eugene Brieux.
Lecture: *Contemporary French Theater* by M. Eugene Brieux.
Lecture: *Romain Roland* by Mlle. de Lagneau.
French Protestant Church service.

German (twelfth-grade class)—
Theater to see *Minna von Barnhelm.*

Clay Modeling—
The Art Institute (to see Arts and Crafts Exhibit).
Marshall Field & Company (to see Syracuse Pottery Exhibit).
Studio of Mr. Mulligan and Mr. Taft.

Metal Work—
The Art Institute.
Thomas J. Dee & Company (metal refiners and assayers).
The Kalo Shop.

Artist Recitals (Music Department)—
Mrs. Robert McInness, piano.
The Misses Fuller, folksongs.
Mme. Melville Liszniewska, piano.
Miss Amy Emerson Neill, violin.
Mr. Ludwig Baur, bass.